Water levels are graphed two ways in the following slides

- Current water levels are compared to the distribution of historical water-level data over the entire period for which they were measured
- Current water levels are compared to water levels in the year for which winter water levels were the lowest

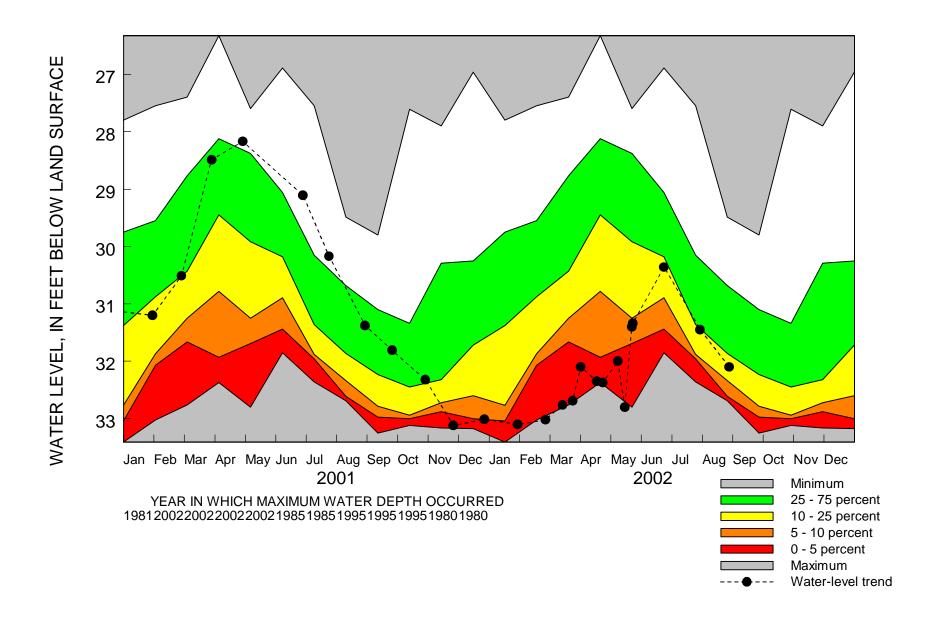


# Explanation of slides comparing current water levels to historical monthly water levels

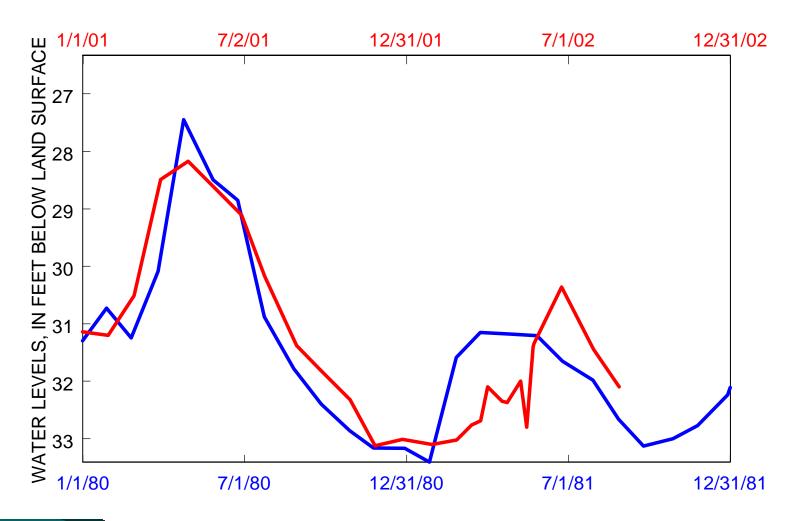
- Water levels are recorded as the depth to water, so the maximum water level is the deepest (lowest) water level ever recorded in that month
- The minimum and maximum water levels and the 5<sup>th</sup>, 10<sup>th</sup>, 25<sup>th</sup>, and 75<sup>th</sup> percentile were calculated for each month since measurements were begun
- A percentile is the water level exceeded by that percent of the water levels.
- For example, if the water level at the 5<sup>th</sup> percentile in January is 10 feet, the water level has been lower than 10 feet in 5 percent of the January measurements ever made



# Water levels in USGS well BD-8, Brookfield, CT

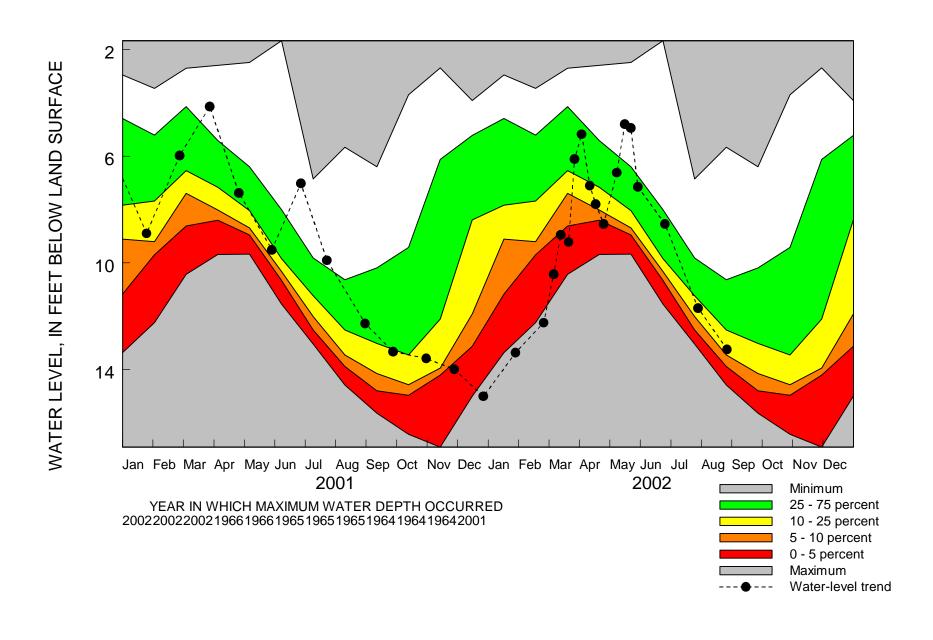


# Water levels in well BD-8 in 1980-81 and 2001-02

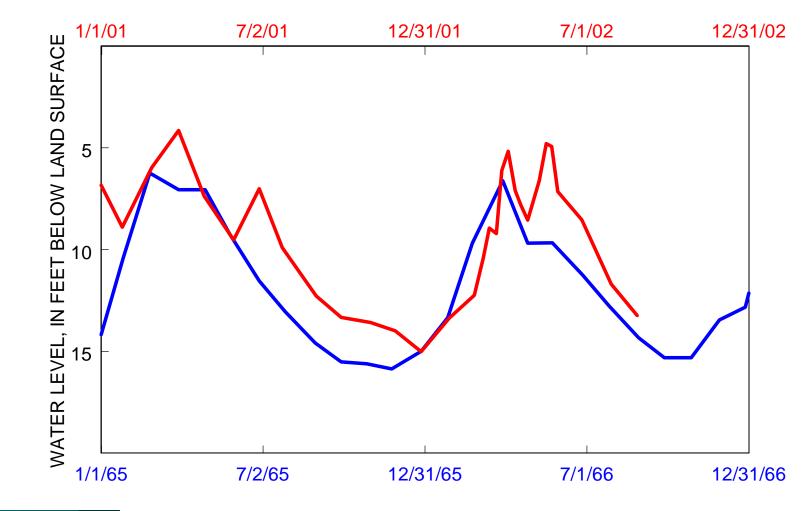




# Water levels in USGS well MF-1, Middlefield, CT

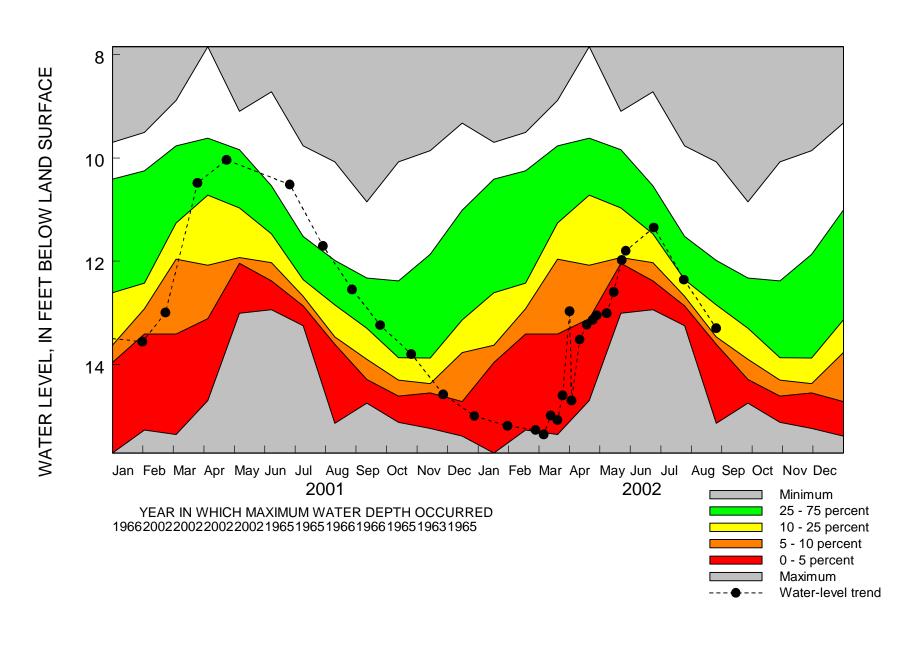


# Water levels in well MF-1 in 1965-66 and 2001-02

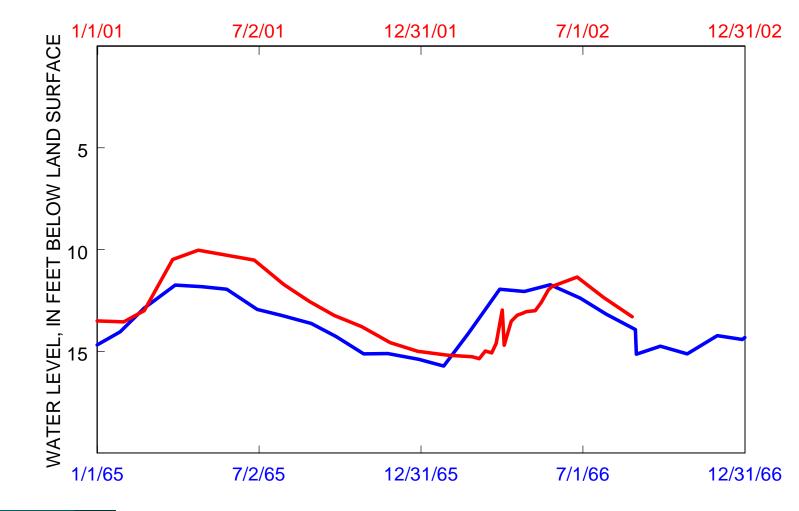




# Water levels in USGS well MS-19, Mansfield, CT

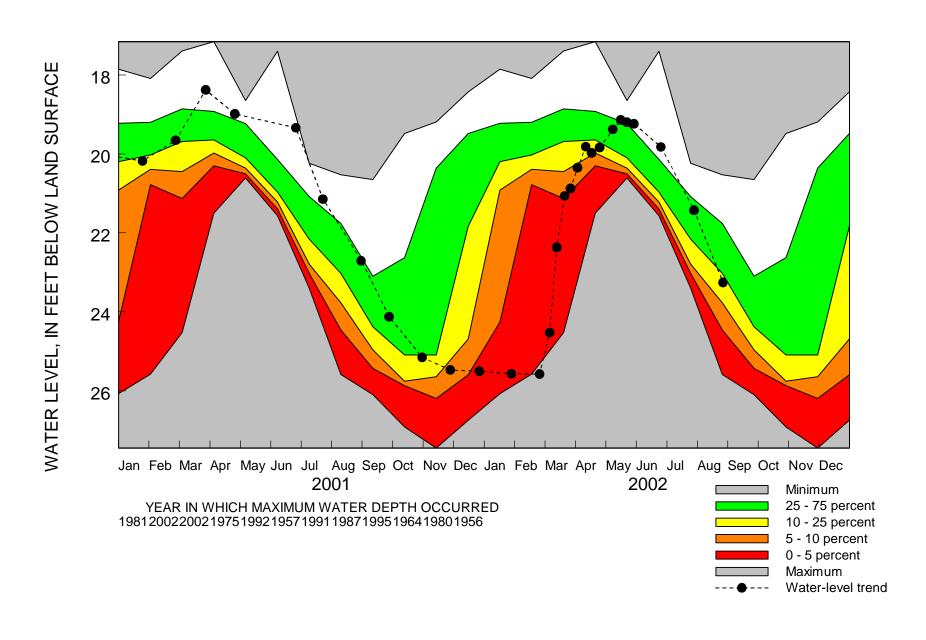


### Water levels in MS-19 in 1965-66 and 2001-02

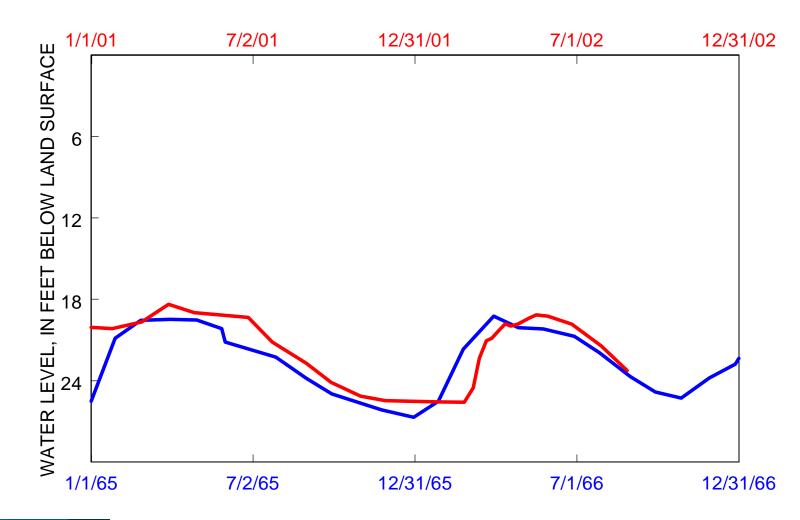




# Water levels in USGS MT-261, Middletown, CT

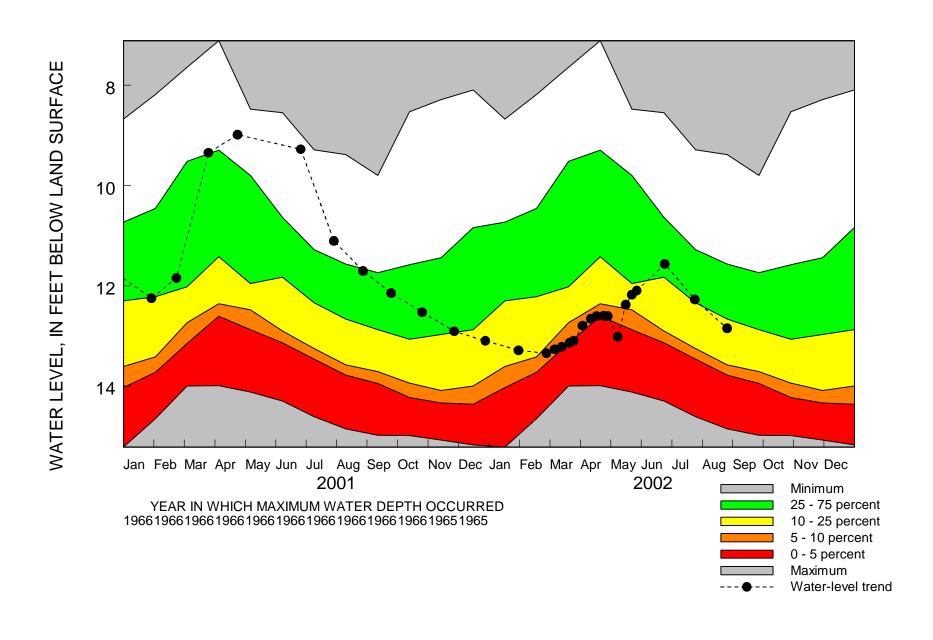


# Water levels in well MT-261 in 1965-66 and 2001-02

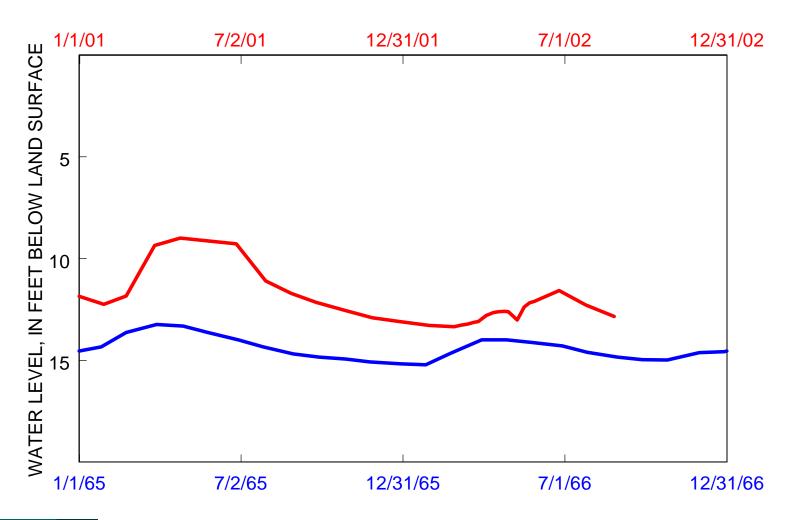




# Water levels in USGS SW-64, South Windsor, CT

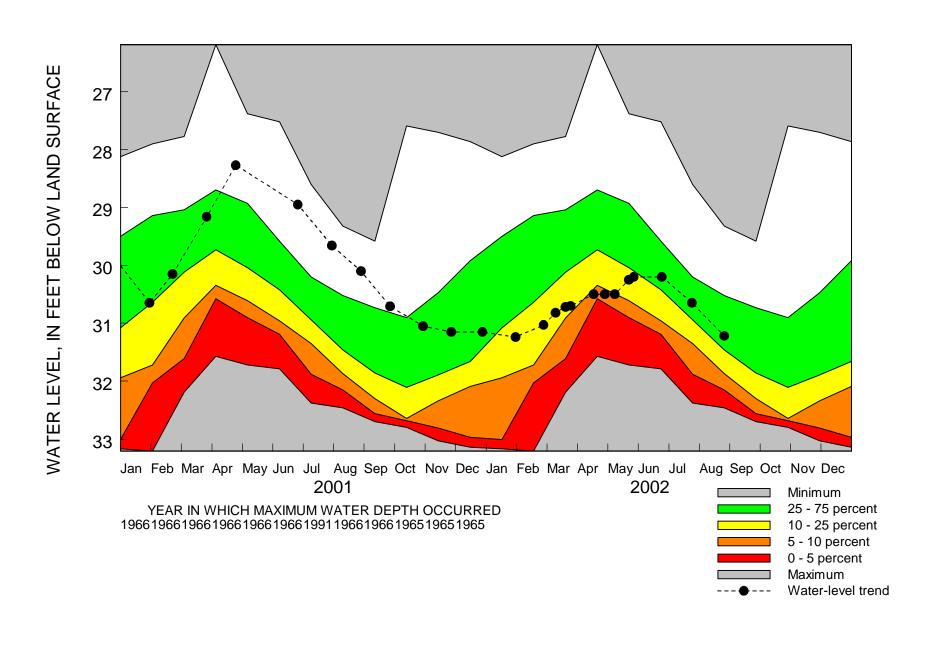


### Water levels in well SW-64 in 1965-66 and 2001-02

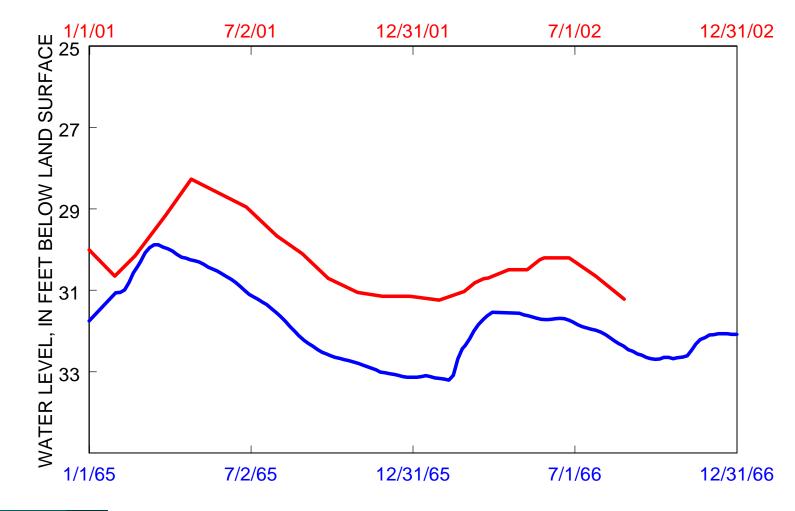




# Water levels in USGS well PL-1, Plainfield, CT

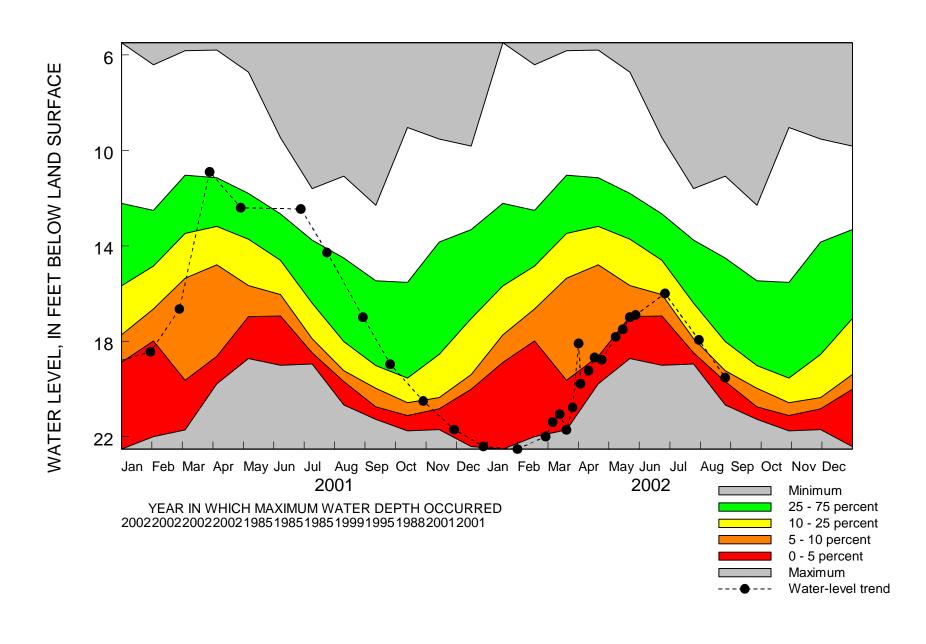


# Water levels in well PL-1 in 1965-66 and 2001-02

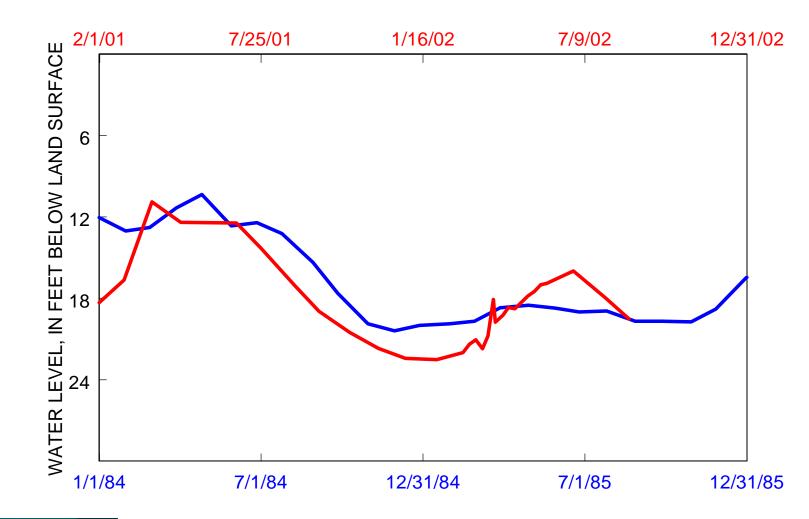




# Water levels in USGS well WB-198, Waterbury, CT

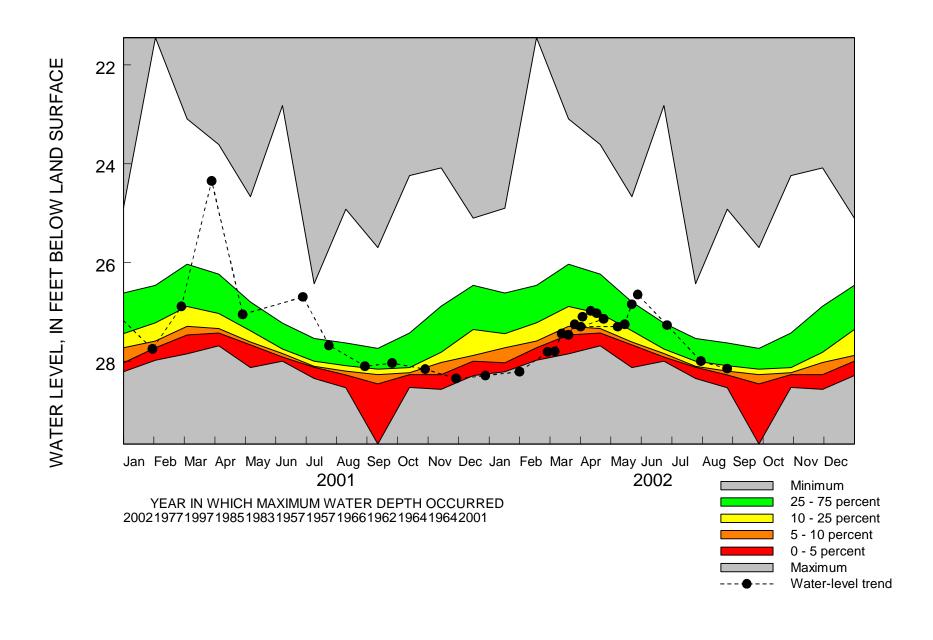


# Water levels in well WB-198 in 1984-85 and 2001-02

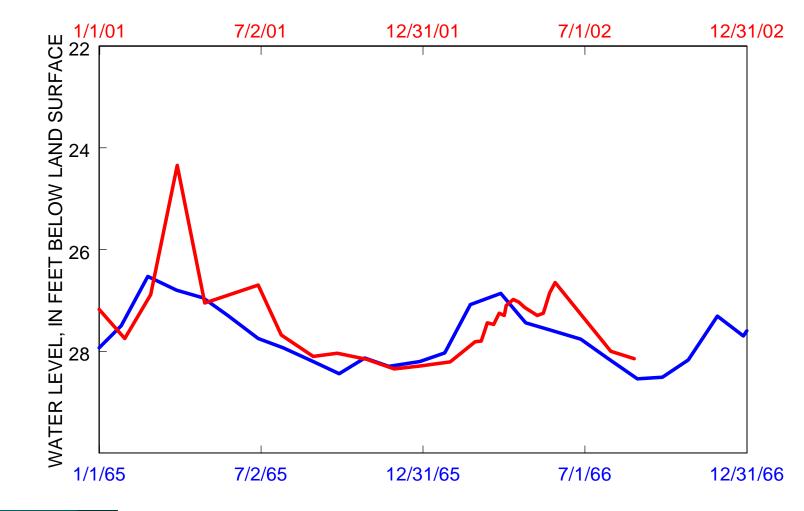




# Water levels in USGS well WB-93, Waterbury, CT



#### Water levels in well WB-93 in 1965-66 and 2001-02





#### Summary of ground-water level observations

- Ground-water levels in eight long-term observation wells are below normal (7 wells) or normal (1 well)
- Even in the drought in the 1960s, water levels rose in the fall and winter
- The pattern of ground-water levels this summer is similar in most wells to the worst drought years on record, which were in 1965-66
- The small amount of precipitation late this summer has caused ground-water levels to to drop below normal in most places



#### Conclusions

- In all eight long-term observation wells, ground-water levels are going down
- Ground-water levels normally go down in summer, and many wells have already reached the highest levels for the year
- Further precipitation this summer will not affect groundwater levels as much as precipitation did in the spring

